UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,604	02/08/2002	William A. White III	SAA-74-1	5361

			EXAMINER
46901	7590	06/07/2006	TORRES, JOSEPH D

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ART UNIT	PAPER NUMBER
2133	

DATE MAILED: 06/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>22 March 2006</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1,2,4-22 and 24-44</u> is/are pending in the application.

    4a) Of the above claim(s) <u>9-16 and 29-44</u> is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1,2,4-8,17-22 and 24-28</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>01 August 2005</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ .

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

DETAILED ACTION

Election/Restrictions

1.   Applicant's election of Group I (claims 1, 2, 4-8, 17-22 and 24-28) in the reply

filed on 10/14/2005 is acknowledged. Because applicant did not distinctly and

specifically point out the supposed errors in the restriction requirement, the election has

been treated as an election without traverse (MPEP § 818.03(a)).

Claims 9-16 and 29-44 are withdrawn from further consideration pursuant to 37 CFR

1.142(b) as being drawn to a nonelected invention, there being no allowable generic or

linking claim. Election was made **without** traverse in the reply filed on 10/14/2005.

Response to Arguments

2.   Applicant's arguments with respect to claims 1, 2, 4-8, 17-22 and 24-28 have

been considered but are moot in view of the new ground(s) of rejection.

However, the Examiner does address the following argument by the Applicant,

"Applicants further respectfully submit that the combination of Dintelmann and Labonte

is improper because there is no motivation or incentive in the prior art to combine those

references in the manner suggested by the Examiner".

Col. 5, lines 59-62 in Dintelmann teaches finding "a block length and an error correction

measure ensuring maximum data throughput combined with the **required residual**

error rate" responsive to the **actual raw bit error rate**. In order to implement the

teachings in Dintelman, the residual error rate and the actual raw bit error rate are

required and even though Dintelman does not teach that the residual error rate and the

actual raw bit error rate are calculated quantities, one of ordinary skill in the art at the

time the invention was made would have known that actual bit error rate is a calculated

quantity and can only be determined by detecting and monitoring actual errors. The

Decision process in Dintelman cannot be carried out without access to both the residual

error rate and the actual raw bit error rate. The motivation is explicitly spelled out in

Dintelman. Any one of ordinary skill in the art at the time the invention was made would

have known how to calculate the required raw bit error rate in Dintelman and use it to

generate residual error rate or how to look it up in any elementary text in error correction

(Stephen B. Wicker, "Error Control Systems for Digital Communication and Storage",

Prentice-Hall, 1995, see page 242, in particular) or how to look it up in a Prior Art such

as Labonte.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating obviousness or nonobviousness.

3.   Claims 1, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Dintelmann; Friedrich et al. (US 6256496 B1, hereafter referred to as Dintelmann)

in view of Labonte; Sylvain et al. (US 5828672 A, hereafter referred to as Labonte) in

further view of the IBM Reference (TDB-ACC-NO: NN86123092; TITLE: Error Control

for Voice/Data Packet Network; PUBLICATION-DATA: IBM Technical Disclosure

Bulletin, December 1986, US; VOLUME NUMBER: 29; ISSUE NUMBER: 7; PAGE

NUMBER: 3092 - 3095; PUBLICATION-DATE: December 1, 1986).

35 U.S.C. 103(a) rejection of claims 1, 17 and 18.

Dintelmann teaches detecting an error (col. 5, line 62 in Dintelmann); responsive to the

actual raw bit error rate finding "a block length and an error correction measure

ensuring maximum data throughput combined with the **required residual error rate**"

[Emphasis Added] (col. 5, lines 59-62 in Dintelmann); correlating a residual error

probability to a block length and an error correction measure in response to the

detected error rate (Merriam-Webster's collegiate Dictionary defines correlate as to

establish a mutual or reciprocal relationship between; hence finding "a block length and

an error correction measure ensuring maximum data throughput combined with the

required residual error rate" responsive to the **actual raw bit error rate** is a means

for establishing a mutual or reciprocal relationship between a required residual error

rate and a block length with an error correction measure); and, based on the residual

error probability, retransmitting a first type of messages and shortening the length of the

first type of messages (col. 5, lines 59-62 in Dintelmann; col. 6, lines 44-45 in

Dintelmann teach that block size is also altered responsive to reduced capacity

utilization, which clearly suggests reducing block size to meet reduced capacity

utilization). Note: in order to implement the teachings in Dintelman, the residual error

rate and the actual raw bit error rate are required and even though Dintelman does not

teach that the residual error rate and the actual raw bit error rate are calculated

quantities, one of ordinary skill in the art at the time the invention was made would have

known that actual bit error rate is a calculated quantity and can only be determined by

detecting and monitoring actual errors. On the other hand, one of ordinary skill in the

art at the time the invention was made would have also known that there is no

mechanism for directly calculating a residual error rate, but that residual error rate is a

theoretical value that is determined from the actual calculated raw bit error rate based

on a particular code (relationships correlating a residual error rate to raw bit error rate

can be found in elementary texts for error correction such as Stephen B. Wicker, "Error

Control Systems for Digital Communication and Storage", Prentice-Hall, 1995, see page

242, in particular).   .

Note also, col. 5, lines 40-51 in Dintelmann clearly suggests at least two different

message types, 1) Voice and video transmission is subject to quality standards that are

different from those set for data transmission **where minimum delay is desirable** (that

is, retransmissions are not a preferable error correction mechanism since they create a

delay) and 2) data services requiring almost error-free transmission whereby minor

delays normally have no importance. Col. 5, lines 40-51 in Dintelmann explicitly

teaches audiovisual traffic is therefore protected with normal forward error correction

measures, while only error-free data communication, when the link is affected by

attenuation, is ensured by adaptive retransmission. The adaptive retransmission in

Dintelmann is taught explicitly for use only with data services and is explicitly not used

for audiovisual traffic.

However Dintelmann does not explicitly teach the specific use of calculating a raw bit

error rate.

Labonte, in an analogous art, teaches use of calculating a raw bit error rate (col. 6, lines

30-39 in Labonte teaches calculating a raw bit error rate) and correlating a residual error

probability in response to the detected error rate (col. 6, lines 49-56 teaches a means

for correlating the residual error probability to previously calculated BER on only frames

that pass the CRC check to produce a residual error probability referred to as residual

BER, RBER, in Labonte; Note: errors detected by the CRC check are errors that went

undetected by error correction decoder 43 in Figure 4 of Labonte).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify Dintelmann with the teachings of Labonte by including

use of calculating a raw bit error rate and correlating a residual error probability in

response to the detected error rate. This modification would have been obvious to one

of ordinary skill in the art, at the time the invention was made, because one of ordinary

skill in the art would have recognized that use of calculating a raw bit error rate and

correlating a residual error probability in response to the detected error rate would have

provided a means for calculating the bit error rates required in Dintelmann for decisions

on retransmission.

However Dintelmann and Labonte do not explicitly teach the specific use of without one

of retransmitting and shortening the length of a second type of messages.

The IBM Reference, in an analogous art, teaches use of not retransmitting and

shortening the length of a second type of messages (page 1 and 2 of the IBM

Reference).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify Dintelmann and Labonte with the teachings of the IBM

Reference by including use of not retransmitting and shortening the length of a second

type of messages. This modification would have been obvious to one of ordinary skill in

the art, at the time the invention was made, because one of ordinary skill in the art

would have recognized that use of not retransmitting and shortening the length of a

second type of messages would have provided minimized delays for voice packets

(page 1 and 2 of the IBM Reference).

4.   Claims 2 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Dintelmann; Friedrich et al. (US 6256496 B1, hereafter referred to as Dintelmann),

Labonte; Sylvain et al. (US 5828672 A, hereafter referred to as Labonte) and the IBM

Reference (TDB-ACC-NO: NN86123092; TITLE: Error Control for Voice/Data Packet

Network; PUBLICATION-DATA: IBM Technical Disclosure Bulletin, December 1986,

US; VOLUME NUMBER: 29; ISSUE NUMBER: 7; PAGE NUMBER: 3092 - 3095;

PUBLICATION-DATE: December 1, 1986) in view of Wicker (Stephen B. Wicker, "Error

Control Systems for Digital Communication and Storage", Prentice-Hall, 1995, pages

240-243 & 396-409).

35 U.S.C. 103(a) rejection of claims 2 and 22.

Dintelmann, Labonte and the IBM Reference substantially teaches the claimed

invention described in claims 1 and 17 (as rejected above).

However Dintelmann, Labonte and the IBM Reference does not explicitly teach the

specific details in claim 2 and 22 for use of a retransmission protocol.

Wicker, in an analogous art, teaches use of retransmission (Equation 15-2 on page 396

of Wicker teach that the residual error rate for accepting packets P(E) is bound by

$P_{ub}(E)/(1 - P_{db}(E))$. Note: $P_e = P_{ub}(E)$ and $P_r = P_{db}(E)$; the last paragraph on page 402 of

Wicker teaches retransmission takes place even if a request for transmission has not

been received).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify Dintelmann, Labonte and the IBM Reference with the

teachings of Wicker by including use of retransmission. This modification would have

been obvious to one of ordinary skill in the art, at the time the invention was made,

because one of ordinary skill in the art would have recognized that use of

retransmission would have provided additional error correction capabilities for the

channel dictated by the particular bounds.

5.   Claims 4 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Dintelmann; Friedrich et al. (US 6256496 B1, hereafter referred to as Dintelmann),

Labonte; Sylvain et al. (US 5828672 A, hereafter referred to as Labonte), the IBM

Reference (TDB-ACC-NO: NN86123092; TITLE: Error Control for Voice/Data Packet

Network; PUBLICATION-DATA: IBM Technical Disclosure Bulletin, December 1986,

US; VOLUME NUMBER: 29; ISSUE NUMBER: 7; PAGE NUMBER: 3092 - 3095;

PUBLICATION-DATE: December 1, 1986) and Wicker (Stephen B. Wicker, "Error

Control Systems for Digital Communication and Storage", Prentice-Hall, 1995, pages

240-243 & 396-409) in view of Schroeder; Robert Edward et al. (US 5933111 A,

hereafter referred to as Schroeder).

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35 U.S.C. 103(a) rejection of claims 4 and 24.

Dintelmann, Labonte, the IBM Reference and Wicker substantially teaches the claimed

invention described in claims 1, 2, 17 and 18 (as rejected above).

However Dintelmann, Labonte, the IBM Reference and Wicker do not explicitly teach

the specific use of ceasing transmission of the message.

Schroeder, in an analogous art, teaches ceasing transmission whenever an error

condition that a corrective action cannot overcome occurs (col. 1, lines 55-58 in

Schroeder).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify Dintelmann, Labonte, the IBM Reference and Wicker with

the teachings of Schroeder by including use of ceasing transmission of the message.

This modification would have been obvious to one of ordinary skill in the art, at the time

the invention was made, because one of ordinary skill in the art would have recognized

that use of ceasing transmission of the message would have provided the opportunity to

abort transmission whenever an error condition that a corrective action cannot

overcome occurs (col. 1, lines 55-58 in Schroeder).

6.   Claims 5, 6, 8, 19-21, 25, 26 and 28 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Dintelmann; Friedrich et al. (US 6256496 B1, hereafter referred

to as Dintelmann), Labonte; Sylvain et al. (US 5828672 A, hereafter referred to as

Labonte), the IBM Reference (TDB-ACC-NO: NN86123092; TITLE: Error Control for

Voice/Data Packet Network; PUBLICATION-DATA: IBM Technical Disclosure Bulletin,

December 1986, US; VOLUME NUMBER: 29; ISSUE NUMBER: 7; PAGE NUMBER:

3092 - 3095; PUBLICATION-DATE: December 1, 1986) and Wicker (Stephen B.

Wicker, "Error Control Systems for Digital Communication and Storage", Prentice-Hall,

1995, pages 240-243 & 396-409).

35 U.S.C. 103(a) rejection of claims 5 and 6.

Dintelmann, Labonte, the IBM Reference and Wicker substantially teaches the claimed

invention described in claims 1 and 2 (as rejected above).

However Dintelmann, Labonte, the IBM Reference and Wicker do not explicitly teach

the specific use of Maximum Likelihood filtering to determine residual error rates.

The Examiner asserts that Dintelmann, Labonte, the IBM Reference and Wicker teach a means for determining residual error rates, but do not teach specific hardware for determining residual error rates. One of ordinary skill in the art at the time the invention was made would have been highly motivated to create a specific hardware means for implementing the design in the Dintelmann, Labonte, the IBM Reference and Wicker patents.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Dintelmann, Labonte, the IBM Reference and Wicker by including use of Maximum Likelihood filtering to determine residual error rates. This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized that use of Maximum Likelihood filtering to determine residual error rates would have provided the opportunity for implementing the design in the Dintelmann, Labonte, the IBM Reference and Wicker references.

35 U.S.C. 103(a) rejection of claim 8.

Dintelmann, Labonte, the IBM Reference and Wicker substantially teaches the claimed invention described in claims 1, 2 and 5-7 (as rejected above).

However Dintelmann, Labonte, the IBM Reference and Wicker do not explicitly teach the specific use of a PID.

The Examiner asserts that using a specific part of a packet to determine residual error rate does not deviate from the scope or the intent of the teachings in Dintelmann,

Labonte, the IBM Reference and Wicker since Dintelmann, Labonte, the IBM Reference

and Wicker encompass error correction for any and all parts of the packet.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the teachings of Dintelmann, Labonte, the IBM Reference

and Wicker by including use of a PID. This modification would have been obvious to

one of ordinary skill in the art, at the time the invention was made, because one of

ordinary skill in the art would have recognized that use of a PID would have provided

the opportunity to correct errors in any or all parts of the packet.

35 U.S.C. 103(a) rejection of claims 19-21.

Dintelmann, Labonte, the IBM Reference and Wicker substantially teaches the claimed

invention described in claims 17 and 18 (as rejected above).

However Dintelmann, Labonte, the IBM Reference and Wicker do not explicitly teach

the specific use of specific hardware used to determine residual error rates.

The Examiner asserts that Dintelmann, Labonte, the IBM Reference and Wicker teach a

means for determining residual error rates, but do not teach specific hardware for

determining residual error rates. One of ordinary skill in the art at the time the invention

was made would have been highly motivated to create a specific hardware means for

implementing the design in the Dintelmann, Labonte, the IBM Reference and Wicker

patents.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the teachings of Dintelmann, Labonte, the IBM Reference

and Wicker by including use of specific hardware used to determine residual error rates.

This modification would have been obvious to one of ordinary skill in the art, at the time

the invention was made, because one of ordinary skill in the art would have recognized

that use of specific hardware used to determine residual error rates would have

provided the opportunity for implementing the design in the Dintelmann, Labonte, the

IBM Reference and Wicker patents.

35 U.S.C. 103(a) rejection of claims 25 and 26.

Dintelmann, Labonte, the IBM Reference and Wicker substantially teaches the claimed

invention described in claims 17-23 (as rejected above).

However Dintelmann, Labonte, the IBM Reference and Wicker do not explicitly teach

the specific use of Maximum Likelihood filtering to determine residual error rates.

The Examiner asserts that Dintelmann, Labonte, the IBM Reference and Wicker teach a

means for determining residual error rates, but do not teach specific hardware for

determining residual error rates. One of ordinary skill in the art at the time the invention

was made would have been highly motivated to create a specific hardware means for

implementing the design in the Dintelmann, Labonte, the IBM Reference and Wicker

patents.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the teachings of Dintelmann, Labonte, the IBM Reference

and Wicker by including use of Maximum Likelihood filtering to determine residual error

rates. This modification would have been obvious to one of ordinary skill in the art, at

the time the invention was made, because one of ordinary skill in the art would have

recognized that use of Maximum Likelihood filtering to determine residual error rates

would have provided the opportunity for implementing the design in the Dintelmann,

Labonte, the IBM Reference and Wicker patents.

35 U.S.C. 103(a) rejection of claim 28.

Dintelmann, Labonte, the IBM Reference and Wicker substantially teaches the claimed

invention described in claims 17-23 and 25-27 (as rejected above).

However Dintelmann, Labonte, the IBM Reference and Wicker do not explicitly teach

the specific use of a PID.

The Examiner asserts that using a specific part of a packet to determine residual error

rate does not deviate from the scope or the intent of the teachings in Dintelmann,

Labonte, the IBM Reference and Wicker since Dintelmann, Labonte, the IBM Reference

and Wicker encompass error correction for any and all parts of the packet.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the teachings of Dintelmann, Labonte, the IBM Reference

and Wicker by including use of a PID. This modification would have been obvious to

one of ordinary skill in the art, at the time the invention was made, because one of

ordinary skill in the art would have recognized that use of a PID would have provided

the opportunity to correct errors in any or all parts of the packet.

7.   Claims 7 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Dintelmann; Friedrich et al. (US 6256496 B1, hereafter referred to as Dintelmann),

Labonte; Sylvain et al. (US 5828672 A, hereafter referred to as Labonte), the IBM

Reference (TDB-ACC-NO: NN86123092; TITLE: Error Control for Voice/Data Packet

Network; PUBLICATION-DATA: IBM Technical Disclosure Bulletin, December 1986,

US; VOLUME NUMBER: 29; ISSUE NUMBER: 7; PAGE NUMBER: 3092 - 3095;

PUBLICATION-DATE: December 1, 1986) and Wicker (Stephen B. Wicker, "Error

Control Systems for Digital Communication and Storage", Prentice-Hall, 1995, pages

240-243 & 396-409) in view of Mangold; Peter et al. (US 5926232 A, hereafter referred

to as Mangold).

35 U.S.C. 103(a) rejection of claims 7 and 27.

Dintelmann, Labonte, the IBM Reference and Wicker substantially teaches the claimed

invention described in claims 1 and 17 (as rejected above).

However Dintelmann, Labonte, the IBM Reference and Wicker do not explicitly teach

the specific use of rate of deterioration.

Mangold, in an analogous art, teaches use of rate of deterioration (The decision to

change error correction codes in Mangold is based on changes in residual error rates,

hence is substantially based on rate of deterioration of the residual error rates).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify Dintelmann, Labonte, the IBM Reference and Wicker with

the teachings of Mangold by including use of rate of deterioration. This modification

would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized that use of rate of deterioration would have provided increased error correction capabilities (Abstract and col. 2, lines 14-24 in Mangold).
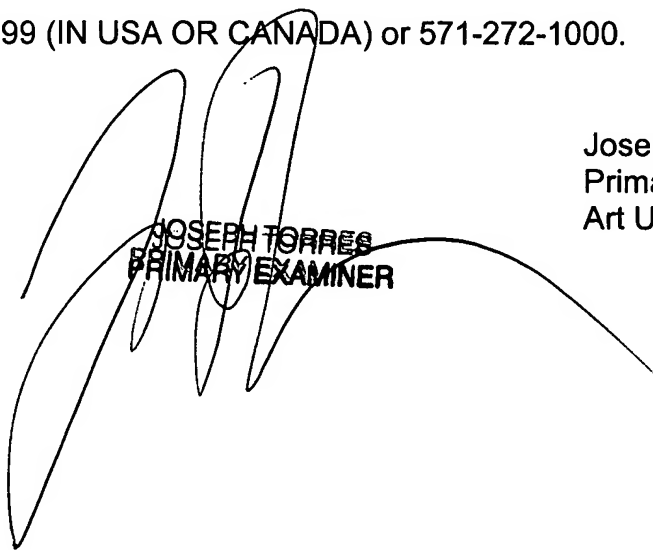
Conclusion

8.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Torres whose telephone number is (571) 272-3829. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

Customer Service Representative or access to the automated information system, call

800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Joseph D. Torres, PhD
Primary Examiner
Art Unit 2133